

**DEPARTMENT OF FOOD AND AGRICULTURE**

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**TO ALL INTERESTED PARTIES:**

Enclosed are copies of the latest nonfat powder, bulk butter and Cheddar cheese processing costs for the period of January through December 2003. The cost studies have been adjusted for utility costs for September 2004 and updated for 2004 changes in wages, payroll taxes, and fringe benefits. The processing cost data does not include the cost of raw product nor does it include any cost of marketing finished product.

For each of the three manufactured products, the cost data are presented in a table that shows actual weighted-average cost of plants grouped by efficiency. Also enclosed is a summary table showing the weighted-average manufacturing cost for nonfat powder, butter and Cheddar cheese as published since May 1989. Cost includes packaging, processing labor, processing non-labor, general and administrative cost, return on investment and, for butter and Cheddar cheese, miscellaneous ingredients.

Also, enclosed are copies of California butter and cheese sales for the months of January 2001 through September 2004. These sales are then compared to the monthly Chicago Mercantile Exchange prices for the comparable time periods.

Should you have any questions regarding this material, please contact Tom Gossard or me at the telephone number or e-mail address above.

Sincerely,

Edward Hunter  
Supervising Auditor I

Enclosures

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**Weighted Average Manufacturing Costs  
for Butter, Nonfat Powder and Cheddar Cheese  
1989 - 2004**

Costs include processing labor, non-labor processing, packaging, other ingredients (for butter and Cheddar cheese only), general and administrative and return on investments.

<b><u>Date of Release</u></b>		<b><u>Butter</u></b>		<b><u>Nonfat Powder</u></b>		<b><u>Cheddar Cheese</u></b> <sup>1</sup>	
<b><u>Year</u></b>	<b><u>Month</u></b>	<b><u>Cost per Pound</u></b>	<b><u>Number of Plants</u></b>	<b><u>Cost per Pound</u></b>	<b><u>Number of Plants</u></b>	<b><u>Cost per Pound</u></b>	<b><u>Number of Plants</u></b>
1989	May	\$0.0879	11	\$0.1370	11	\$0.2251	9
1992	July	\$0.0969	12	\$0.1443	12	\$0.2010	9
1995	November	\$0.0928	9	\$0.1328	9	\$0.1981	8
1996	December	\$0.0970	9	\$0.1333	9	\$0.1898	8
1997	July	\$0.0958	8	\$0.1327	9	\$0.1840	9
1999	February	\$0.0930	8	\$0.1277	9	\$0.1759	10
2000	February	\$0.0957	8	\$0.1356	10	\$0.1693	9
2001	October <sup>2</sup>	\$0.1001	8	\$0.1590	11	\$0.1802	9
2002	November <sup>3</sup>	\$0.1208	7	\$0.1619	11	\$0.1775	9
2002	December <sup>4</sup>	\$0.1211	7	\$0.1512	11	\$0.1746	9
2003	November <sup>5</sup>	\$0.1235	7	\$0.1464	10	\$0.1632	9
2004	November <sup>6</sup>	\$0.1299	7	\$0.1560	10	\$0.1706	9
2004	December <sup>7</sup>	\$0.1321	7	\$0.1551	10	\$0.1734	9

<sup>1</sup> For the 1996 Cheddar cheese cost study and subsequent cost studies, we have included costs associated with Cheddar cheese plants producing 500 pound barrels and 640 pound blocks. However, costs for packaging labor and packaging expenses were replaced with the average of those costs associated with 40 pound block plants.

<sup>2</sup> Includes the cost studies completed for periods between January 1998 and December 1999 and adjusted for utility costs. The utility cost adjustments were made using each plant's invoices for energy costs for August 2001.

<sup>3</sup> Includes the unadjusted cost studies for periods between July 2000 and December 2001.

<sup>4</sup> Includes the cost studies for periods between July 2000 and December 2001 and adjusted for August 2002 utility invoices as well as 2002 data updating wages, payroll taxes and fringe benefits for all plants.

<sup>5</sup> Includes the unadjusted cost studies for periods between January and December 2002.

<sup>6</sup> Includes the unadjusted cost studies for periods between January and December 2003.

<sup>7</sup> Includes the cost studies for periods between January 2003 and December 2003 and adjusted for September 2004 utility invoices as well as 2004 data updating wages, payroll taxes and fringe benefits for all plants.

## Butter Processing Costs

*Released December 2004*

1. Manufacturing cost data were collected and summarized from 7 California butter plants. The 7 plants processed 362.4 million pounds of butter during the study period, representing 99.8% of the butter processed in California.
2. The processing costs summarized in this study were incurred during a 12-month period, starting in January 2003 and concluding in December 2003. The cost studies have been adjusted for natural gas and electricity based on September 2004 invoices and also updated for wages, fringe benefits and payroll taxes based on 2004 data.
3. The "Processing Non-Labor" category includes costs such as utilities, repairs and maintenance, supplies, depreciation and rent.
4. The volume total includes both bulk butter and cut butter, but the costs reflect only costs for bulk butter (25 kg and 68 lb. blocks).
5. To obtain the weighted average, individual plant costs were weighted by their butter processing volume relative to the total volume of butter processed by all plants involved in the cost study.
6. The current manufacturing cost allowance for butter is \$0.132 per pound. About 59% of the butter was processed at a cost less than the manufacturing cost allowance. The make allowance would have to be approximately \$0.157 to cover 80% of butter production.

<u>Cost Groups</u>	<u>Number of Plants</u>	<u>Processing Labor</u>	<u>Processing Non-Labor</u>	<u>Package</u>	<u>Other Ingredient</u>	<u>General &amp; Administrative</u>	<u>Return on Investment</u>	<u>Total Cost</u>	<u>Volume in Group</u>	<u>Percent in Group</u>
<i>dollars per pound of butter</i>										
Low Cost	3	\$0.0424	\$0.0403	\$0.0090	\$0.0025	\$0.0115	\$0.0029	\$0.1086	215,142,837	59.4%
High Cost	4	\$0.0594	\$0.0676	\$0.0089	\$0.0064	\$0.0179	\$0.0062	\$0.1664	147,243,710	40.6%
<u>Summary Statistics</u>										
<b>Weighted Average</b>		<b>\$0.0493</b>	<b>\$0.0514</b>	<b>\$0.0090</b>	<b>\$0.0041</b>	<b>\$0.0141</b>	<b>\$0.0042</b>	<b>\$0.1321</b>		
Range {	Minimum	\$0.0352	\$0.0359	\$0.0062	\$0.0015	\$0.0069	\$0.0025			
	Maximum	\$0.1621	\$0.1041	\$0.0105	\$0.0089	\$0.0620	\$0.0067			
Total									362,386,547	100%

## Nonfat Powder Processing Costs

*Released December 2004*

1. Manufacturing cost data were collected and summarized from 10 California nonfat powder plants. The 10 plants processed 739 million pounds of nonfat powder during the study period, representing 100% of the nonfat powder processed in California.
2. The processing costs summarized in this study were incurred during a 12-month period, starting in January 2003 and concluding in December 2003. The cost studies have been adjusted for natural gas and electricity based on September 2004 invoices and also updated for wages, fringe benefits and payroll taxes based on 2004 data.
3. The "Processing Non-Labor" category includes costs such as utilities, repairs and maintenance, supplies, depreciation and rent.
4. The volume total includes all grades of nonfat powder packaged in any container size, but the costs reflect only costs for 25 kg and 50 lb. bags of nonfat powder.
5. To obtain the weighted average, individual plant costs were weighted by their nonfat powder processing volume relative to the total volume of nonfat powder processed by all plants involved in the cost study.
6. The current manufacturing cost allowance for nonfat powder is \$0.15 per pound. About 63% of the nonfat powder was processed at a cost less than the manufacturing cost allowance. The make allowancee would have to be approximately \$0.165 to cover 80% of nonfat powder production.

<u>Cost Groups</u>	<u>Number of Plants</u>	<u>Processing Labor</u>	<u>Processing Non-Labor</u>	<u>Package</u>	<u>General &amp; Administrative</u>	<u>Return on Investment</u>	<u>Total Cost</u>	<u>Volume in Group</u>	<u>Percent in Group</u>
<i>dollars per pound of powder</i>									
Low Cost	3	\$0.0343	\$0.0784	\$0.0145	\$0.0095	\$0.0047	\$0.1414	465,947,584	63.1%
Medium Cost	4	\$0.0371	\$0.0974	\$0.0144	\$0.0125	\$0.0076	\$0.1690	239,070,247	32.4%
High Cost	3	\$0.0715	\$0.1334	\$0.0122	\$0.0196	\$0.0085	\$0.2452	33,972,103	4.6%
<u>Summary Statistics</u>									
<b>Weighted Average</b>		<b>\$0.0369</b>	<b>\$0.0871</b>	<b>\$0.0144</b>	<b>\$0.0109</b>	<b>\$0.0058</b>	<b>\$0.1551</b>		
Range {	Minimum	\$0.0284	\$0.0727	\$0.0106	\$0.0068	\$0.0028			
	Maximum	\$0.0985	\$0.2093	\$0.0148	\$0.0353	\$0.0098			
Total								738,989,934	100%

## Cheese Processing Costs

*Released December 2004*

1. Manufacturing cost data were collected and summarized from 9 California cheese plants. The 9 plants processed 756.6 million pounds of cheese during the study period, representing 99.6% of the Cheddar and Monterey Jack cheese processed in California.
2. The processing costs summarized in this study were incurred during a 12-month period, starting in January 2003 and concluding in December 2003. The cost studies have been adjusted for natural gas and electricity based on September 2004 invoices and also updated for wages, fringe benefits and payroll taxes based on 2004 data.
3. The "Processing Non-Labor" category includes costs such as utilities, repairs and maintenance, supplies, depreciation and rent.
4. The volume total includes both Cheddar and Monterey Jack cheeses, but the costs reflect only costs for 40 lb. blocks of Cheddar.
5. Three plants processed 500-lb. barrels or 640-lb. blocks. Packaging costs and packaging labor for 40 lb. blocks were substituted for these plants.
6. To obtain the weighted average, individual plant costs were weighted by their cheese processing volume relative to the total volume of cheese processed by all plants involved in the cost study.
7. The current manufacturing cost allowance for cheese is \$0.175 per pound. About 79% of the cheese was processed at a cost less than the manufacturing cost allowance. The make allowance would have to be approximately \$0.171 to cover 79% of cheese production.
8. The weighted average yield was 10.92 lbs. of cheese per hundredweight of milk. The weighted average moisture was 37.12%, and weighted average vat tests were 3.94% fat and 8.95% SNF.

<u>Cost Groups</u>	<u>Number of Plants</u>	<u>Processing Labor</u>	<u>Processing Non-Labor</u>	<u>Package</u>	<u>Other Ingredient</u>	<u>General &amp; Administrative</u>	<u>Return on Investment</u>	<u>Total Cost</u>	<u>Volume in Group</u>	<u>Percent in Group</u>
<i>dollars per pound of cheese</i>										
Low Cost	3	\$0.0428	\$0.0745	\$0.0176	\$0.0106	\$0.0130	\$0.0058	\$0.1643	458,904,543	60.7%
Medium Cost	3	\$0.0555	\$0.0697	\$0.0203	\$0.0111	\$0.0171	\$0.0038	\$0.1775	236,205,739	31.2%
High Cost	3	\$0.0950	\$0.0798	\$0.0237	\$0.0101	\$0.0129	\$0.0046	\$0.2261	61,454,679	8.1%
<u>Summary Statistics</u>										
<b>Weighted Average</b>		<b>\$0.0510</b>	<b>\$0.0734</b>	<b>\$0.0189</b>	<b>\$0.0107</b>	<b>\$0.0143</b>	<b>\$0.0051</b>	<b>\$0.1734</b>		
Range {	Minimum	\$0.0392	\$0.0519	\$0.0141	\$0.0066	\$0.0077	\$0.0022			
	Maximum	\$0.1309	\$0.1324	\$0.0267	\$0.0224	\$0.0216	\$0.0079			
Total									756,564,961	100%